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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/680,689	10/07/2003	John Thomas Phillips	MUV-3	6221
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EXAMINER

SOUW, BERNARD E

ART UNIT	PAPER NUMBER
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2881

DATE MAILED: 05/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 10/680,689	Applicant(s) PHILLIPS ET AL.	
Examiner Bernard E Souw	Art Unit 2881	

-- Th MAILING DATE of this communication appears on the cov r she t with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 07 October 2003.
- 2a) This action is **FINAL**.
- 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 07 October 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. (USPAT 6,323,601) or Petelin et al. (4,641,033) in view of Shelton (USPAT 5,596,792).

Klein et al. disclose in Fig. 1 a UV lamp system 10 comprising a power supply 12, a "cable" 16 connected to the power supply 12, an irradiator 20 connected to the cable 16 and powered by the power source 12, as recited in Col.3/ll.42-62, and further, an RF screen 44, as shown in Fig.2 and recited in Col.4/ll.60-67.

Petelin et al. also disclose in Fig. 1 a UV lamp system 12 comprising a power supply 30, a "cable" 34 connected to the power supply 30, an irradiator 13 connected to the cable 34 and powered by the power source 30, and an RF screen 16, as shown in Fig.1 and recited in Col.7/ll.54-68 and Col.8/ll.1-27.

However, neither Klein et al. nor Petelin et al. expressly teach to use an RF screen that is releasably attached to the irradiator. As shown in Fig.4 and recited in Col.3/ll.54-58, Shelton teaches to use a screen 12 that is releasably attached to the

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irradiator 16 by a snap-fit connection 10, as recited in the Abstract/II.1-4 from bottom and shown in more details in Fig.1-3.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Klein's and/or Petelin's RF screen with Shelton's snap-fit connection 10 that is releasably attached to the irradiator 16, in order to be able to quickly and easily remove the screen for light source replacement, as taught by Shelton in Col.1/II.41-50.

► Regarding claim 2, Klein's irradiator has a reflector with a curved reflecting surface 42, as shown in Fig.1 and 2 and recited in Col.5/II.1-6; so is also Petelin irradiator, as recited in Col.7/II.63-66. Further, Shelton's screen 12 has a pair of flanges 14 shown in Fig.4 and recited in Col.3/II.40-43 to which the screen is releasably attached.

► Regarding claims 6 and 16, Shelton's screen has plenty of slots that aid in the removal of the screen from the radiator, as generally understood by one of ordinary skill in the art.

► Claims 11 and 22 recite the same limitations of claims 1 and 2 combined, whereby the terms male and female connector recited in claim 22 can be interpreted broadly to simply referring to Shelton's Fig.2 and Fig.3.

3. Claims 3, 12, 13 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. or Petelin et al. in view of Shelton, and in further view of Cristich (USPAT 5,743,754) and Barnick (USPAT 5,232,383).

Klein et al. or Petelin et al. in view of Shelton show all the limitations of claims 3, 12 and 13, as previously applied to the parent claims 1 and 11, respectively, except the recitation that the snap-fit fastener is a ball stud fastener having a ball stud. It is conventional and well known in the art that a snap fastener to connect and retain two general items, including Shelton's flange and screen, can be accomplished by using a ball stud, as recited by Cristich in Col.1/ll.29-36 and ll.55-59, and further detailed by Barnick, as shown in Fig.1A, B and Fig.2, showing a ball stud 11 as recited in Col.3/ll.44-68 and Col.4/ll.1-35.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adopt Cristich's and Barnick's teaching of using a snap fastener in the form of ball studs to modify Shelton's snap-fit connection 10 for use in Klein's or Petelin's UV lamp, since snap fasteners are widely known in the art as having a large variety of forms, including ball studs, such that the particular choice of ball studs is a mere matter of design choice that only involves routine skill in the art, and hence, unpatentable.

► Specifically regarding claim 21, all claim limitations are already encompassed in claims 3, 12 and 13, except the recitation of a snap-fit connection comprising at least one male connector and at least one female connector. Barnick's ball-stud connector, as shown in Fig.1A, 1B and 2, clearly comprises a male and a female part, as conventionally known in the art.

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4. Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. or Petelin et al. in view of Shelton, and in further view of Johnson et al. (USPAT 4,247,737) or Erickson (USPAT 4,535,565).

Klein et al. or Petelin et al. in view of Shelton show all the limitations of claims 4 and 15, as previously applied to the parent claims 1 and 11, respectively, except the recitation of a gasket disposed between the RF screen and the irradiator.

Johnson et al. teach to use a wire gasket 32 between a wire mesh 14 and the window back panel 22, as shown in Fig.3 and recited in Col.3/ll.3-17.

Erickson also teaches to use a wire gasket 10 in an RF device housing 14 depicted in Fig. 1 and Fig.6 between the housing front panel 14a and the inner door panel (or flange) 12a, as recited in Col.3/ll.18-50, the inner door panel 12a may comprise an RF shielding material in the form of a wire mesh, as conventionally found in a microwave oven.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adopt Johnson's teaching of using a wire gasket between the wire mesh and the window panel, here replacing Klein's or Petelin's screen, in order to minimize the leak of hazardous radiation, thus ensuring RF shielding, as taught by Erickson in Col.3/ll.25-28.

5. Claims 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. or Petelin et al. in view of Shelton, and in further view of Weber (USPAT 4,107,770).

Klein et al. or Petelin et al. in view of Shelton show all the limitations of claims 5 and 14, as previously applied to the parent claims 1 and 11, respectively, except the recitation of a spring retainer having a spring clip on one of the RF screen or irradiator, and a notch in the other. Weber invents a lamp fixture having a detachable portion A6 as shown in Fig.32 and recited in Col.14/ll.52-53. Regarding detachment means, Weber's lamp body 400'' is equivalent to Shelton's lamp fixture 16, and Weber's detachable portion A6 with plug base 520 is equivalent to Shelton's detachable screen 12, whereas Weber's spring clips 531 and 532 are equivalent to Shelton's spring clip 10 as attachment means for attaching Weber's plug base 520 to lamp body 400'', which is equivalent to Shelton's screen 12 being attached to the lamp body 16 at 14. Weber's spring clips 525 and 526 --retaining the detachable portion A6 to the lamp base 210-- are held in place by a pair of notches 531 and 532, as recited in Col.14/ll.53-68.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adopt Weber's spring clip and notch pair instead of Shelton's snap-fit connection, since Weber's spring clip & notch is an alternative means, but by all means conventional, to attach Shelton's screen 12 to the lamp body 16, as generally known in the art.

The rationale to modify or combine the prior arts of Shelton and Weber, i.e., to use Weber's spring clip & notch instead of Shelton's snap-fit connection, does not have to be expressly stated in the prior arts; in the present case the rationale is reasoned from knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837

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F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

This relates to suggestion/motivation in that "having established that this knowledge was in the art, the Examiner could then properly rely on a conclusion of obviousness 'from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference'." *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

6. Claims 7, 8, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. or Petelin et al. in view of Shelton, and in further view of Jacques (USPAT 6,483,023) and Kim (USPAT 6,355,878).

Klein et al. or Petelin et al. in view of Shelton show all the limitations of claims 7, 8, 17 and 18, as previously applied to the parent claims 1, 4 and 11, except the recitation of the gasket being selected from the group consisting of a metallic finger gasket and a metal fabric wrapped around an elastomer sponge core center, and that the snap-fit fastener is a finger gasket assembly having a metallic finger jacket that is releasably engageable with a notch.

Jacques discloses an electromagnetic interference (EMI) shielding comprising a metallic finger gasket shown in Fig. 1b, as recited in Col.3/ll.3-7, wherein it is understood in the art that Jacques's EMIs are applicable for Shelton's purpose of screening the microwave source from leaking into the environment. Kim also describes

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in Fig.2A and 2B a metal finger gasket formed as a clip type gasket, as recited in Col.3/ll.37-57.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Jacques's or Kim's metallic finger gasket to Klein's or Petelin's device as modified by Shelton, since metallic finger gaskets are the perfect type of gaskets for use in such an RF device as Klein's or Petelin's device as modified by Shelton, as generally known in the art.

The rationale to modify or combine the prior arts of Shelton's and Jacques's & Kim's, i.e., to use Jacques's and Kim's metallic finger gasket as an RF seal between Shelton's wire mesh and the UV lamp housing flange, does not have to be expressly stated in the prior arts; in the present case the rationale is reasoned from knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

This relates to suggestion/motivation in that "having established that this knowledge was in the art, the Examiner could then properly rely on a conclusion of obviousness 'from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference.'" *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

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7. Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. or Petelin et al. in view of Shelton, and in further view of Hee (USPAT 5,004,425).

Klein et al. or Petelin et al. in view of Shelton show all the limitations of claims 9 and 19, as previously applied to the parent claims 1 and 11, except the recitation of using a magnetic fastener instead of Shelton's spring retainer. Cristich describes a removable method of connecting and retaining two general items, including Shelton's flange and screen, as recited in Col.1/ll/10-18. Among the various methods recommended by Cristich is also a magnetic fastener, as recited by Cristich in Col.1/ll.60-63, which is further detailed by Hee in Col.3/ll.32-44 and shown in Fig.1 & 5.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adopt Cristich's and Hee's teaching of using a magnetic fastener to modify Shelton's snap-fit connection 10 for use in Klein's or Petelin's UV lamp, since magnetic fasteners are widely known as being a universal fastener, as generally known to one of ordinary skill in the art.

8. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. or Petelin et al. in view of Shelton, and in further view of Tharp et al. (USPAT 4,837,769).

Klein et al. or Petelin et al. in view of Shelton show all the limitations of claims 10 and 20, as previously applied to the parent claims 1 and 11, except the recitation of using a quarter-turn type fastener as snap-fit fastener. Tharp et al. disclose a quarter-

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turn type fastener 64 shown in Fig.1 to removably attach an electrical plate 18 on a tab 68 which is an integral part of the housing 2, the electrical plate 18 here replacing Shelton's wire screen 12, and Tharp's housing 2 replacing Shelton's lamp housing 16.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adopt Tharp's teaching of using a quarter-turn type fastener to modify Shelton's snap-fit connection 10 for use in Klein's or Petelin's UV lamp, since quarter-turn type fastener are widely known as being a universal fastener, as generally known to one of ordinary skill in the art.

9. Regarding claims 3, 12, 13, Shelton's snap-fit connection has been replaced by Christich's and Barnick's ball stud fastener; regarding claims 5 and 14, Shelton's snap-fit connection has been replaced by Weber's spring clip and notch; regarding claims 9 and 19, Shelton's snap-fit connection has been substituted by Hee's magnetic fastener; whereas regarding claims 10 and 20 Shelton's snap-fit connection has been substituted by Tharp's quarter-turn fastener. Since applicant has not disclosed that each of the particular type of fasteners solves any stated problem, or has any particular purpose, and it appears that the invention would perform equally well with Shelton's snap-fit connection, such substitution is thereby no other than a mere matter of design choice that is obvious and involves only routine skill in the art. Therefore, such substitutions or replacements are unpatentable.

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10. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. or Petelin et al. in view of Shelton, and in further view of Cristich, Barnick, Johnson et al., Erickson, Jacques and Kim.

Claim 21 recites a combination of all the limitations of claims 1-4 and 7. Therefore, claim 21 is rejected as being obvious also over a combination of Cristich, Barnick, Johnson et al., Erickson, Jacques and Kim, i.e., prior arts previously applied on the rejections of claims 1-4 and 7.

Communications

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw whose telephone number is 571 272 2482. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571 272 2477. The central fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communications as well as for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

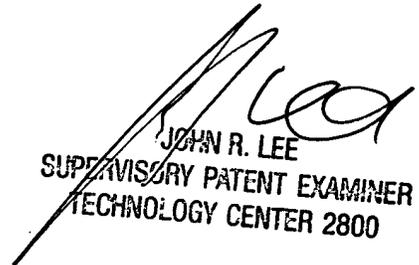
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May 13, 2004



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